

User Guide

Ingenico 5100M



RoHS compliant



2002/95/EC



Secure transaction and payment solutions

Secure transaction solutions For everyone everywhere

i5000

Countertops

The top seller in the world
Compact and easy to use



i7000

Indoor Wireless

Bluetooth, Wi-Fi, GPRS
Convenience and comfort



i8000

Outdoor Wireless

GSM, GPRS, CDMA

All your business on a terminal
Ruggedized, bar code reading,
finger print capture,
touch screen, text to speech...



i6000

Interactive PIN Pads

Signature capture
Touch screen
Interactive advertising



i3000

PIN Pads

Fast and easy way to upgrade
your existing POS system to
accept EMV payments



i2000

Check readers

Fast and easy processing of
checks
Reduced fraud



i9000

Unattended

Full EMV solution
GPRS ready
Separate components for
easy integration



EMV APPROVED[®]



UNICAPT 32

The common secure platform to
all our product range

+33 (0)1 46 25 82 00

www.ingenico.com



Contents

1	Presentation	5
1.1	Overview of Ingenico 5100	6
1.2	Keyboard details and functionality	7
2	Use.....	9
2.1	Card reading	9
2.2	Terminal maintenance	9
2.3	Cutting the paper	9
2.4	Changing the roll of paper	10
3	Installation and starting.....	11
3.1	Location of the terminal	11
3.2	Terminal connections.....	11
3.3	Installing a SIM card	14
3.4	Troubleshooting	15
4	Recommendations	16
4.1	Security.....	16
4.1.1	Checking PIN pad integrity.....	16
4.1.2	Selecting the place where the PIN pad is installed	16
4.1.3	Necessary advertisements for customers	16
4.1.4	Training cashiers.....	16
4.2	Safety	16
4.3	Switched Telephone Network (STN).....	17
4.4	WEEE	17
5	Index.....	18

Thank you for choosing an Ingenico product!

We hope that you will be fully satisfied with your new terminal. In order to fully meet the requirements of our different customer users, the new Ingenico terminal comes in different models:



Ingenico 5300 – hand over



Ingenico 7300 – portable



Ingenico 7700 – radio

Your model, the Ingenico 5100 is a **compact** mono block terminal, for a minimal clutter; **Effective**, processor 32-bits inside; **Highly secured**, EMV level 2 certified.

Ingenico 5100 features a new ergonomic design that provides a friendly interface for the user:


- "Easy loading" printer to load paper easier and quicker,
- Large graphic display with adjustable contrast,
- Fast communications.

The environment is also a priority for Ingenico:

- Lighter packaging,
- Use of non-toxic products,
- Recyclable plastics.

Please read this manual to understand and make the best use of your terminal.

It presents the terminal and its different characteristics, offers quick and easy use and finally describes a standard terminal installation (from unpacking to starting for the first time). Furthermore, the manual features a contents table and an index at the end of the manual for easy reference for specific needs, such as changing the roll of paper.

 *The manual describes a terminal without application software. A separate manual will be supplied for each application installed. Certain connection options presented in this manual can differ according to which model you possess.*

 **This symbol indicates an important warning.**

 *This symbol indicates a piece of information.*

1 Presentation

Ingenico 5100 is an electronic payment terminal designed to accept payment using magnetic stripe and smart cards.

The terminal box contains:



The terminal



The power supply unit and the cable that connects the power supply to the electric network

- ⚡ **The power supply unit supplied is specially designed for the terminal. Do not use any other unit.**

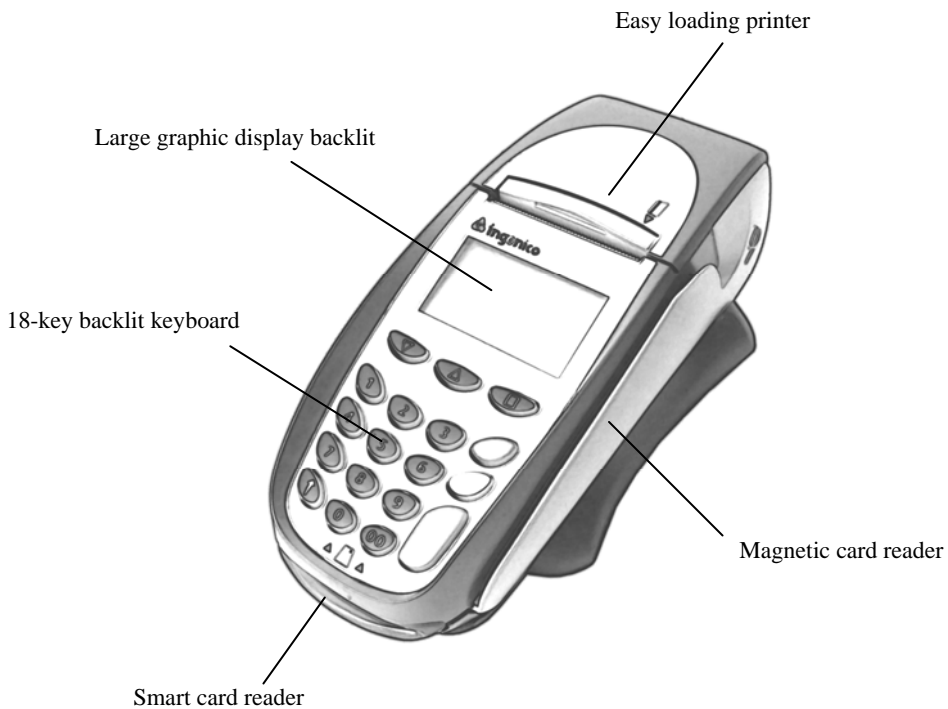


International telephone cable

- This manual
- The EC compliance fascicle
- A cable securing plate.

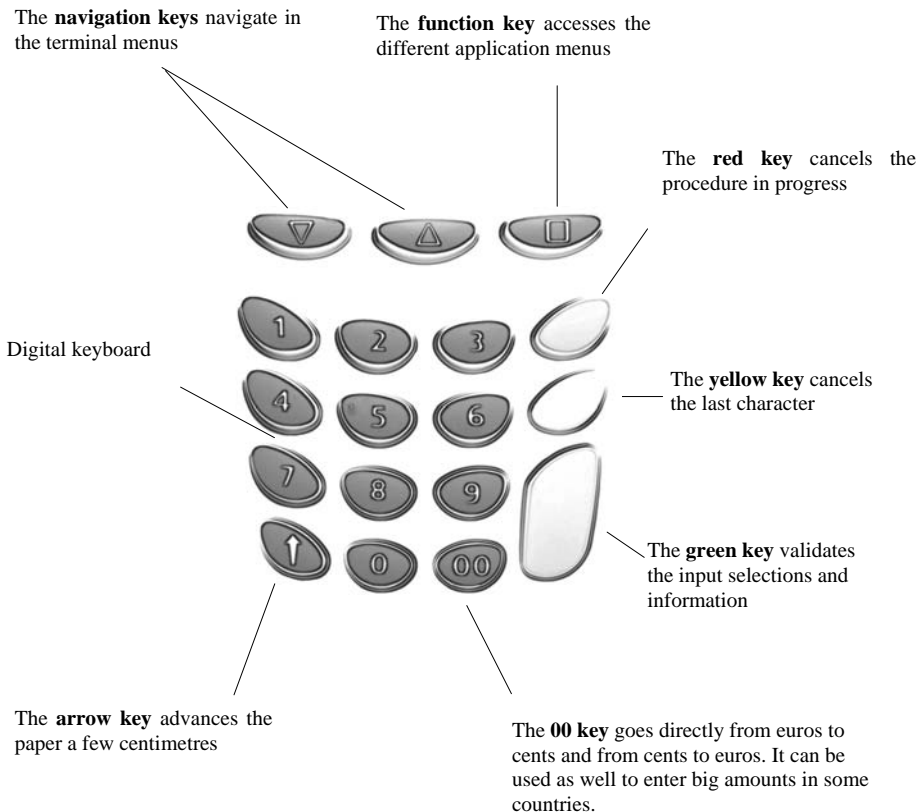
- ⚡ **The model of the power supply unit and the telephone cable and plug depend on the country.**

1.1 Overview of Ingenico 5100



1.2 Keyboard details and functionality

This chapter describes the key functions for a terminal with no specific application. Some keys can have other functions according to the applications that are present in the terminal.



2 Use

⚡ **Before to use the terminal, always check if the roll of paper is present!**

2.1 Card reading

Magnetic stripe card

The card can be read either from bottom to top or from top to bottom, with the stripe facing the terminal.

Use a regular movement in order to ensure a reliable card reading.

Smart card

Insert the card horizontally with the metal chip facing upwards and leave in position throughout the transaction.



2.2 Terminal maintenance

⚡ **Make sure the terminal is off for all cleaning operations.**

- Do not clean the terminal with water but with a dry or only slightly damp cloth.
- Do not use solvent, detergent or abrasive products.

2.3 Cutting the paper

The right way to cut the paper is to pull it from rear ("printer bag") to front (smart card):

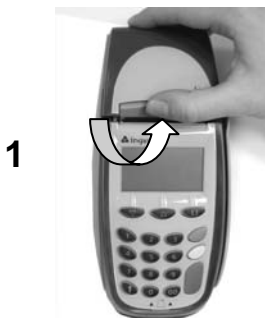


2.4 Changing the roll of paper

Ingenico 5100 features an "easy loading" printer, for easy paper roll replacement.

- ⚠ **Switch the terminal off before doing this operation.**
- ⚠ **Don't touch the printer mechanism. Take care the paper cutter is very sharp and the printer could be very hot!**

- ☞ Open the lid of the terminal by pushing the lid opening button towards the rear,



- ☞ Remove the remaining roll of paper,



- ☞ Insert the new roll of paper as indicated on the photo,



- ☞ Press the terminal lid to close.



- ⚠ **To avoid an overheating of the printer, wait a few seconds between two printings.**

3 Installation and starting

3.1 Location of the terminal

Place the terminal on flat surface near an electric socket and a telephone socket. The terminal should be placed far from any very hot zones, protected from vibrations, dust, damp and electromagnetic radiation (computer screen, anti-theft barrier etc.).

Operating temperatures

+5°C to +40°C.

Humidity

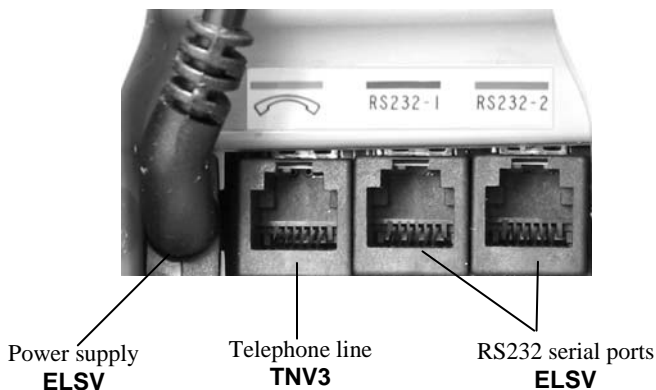
5% to 90% without condensation.

Storage temperature

0°C to +60°C.

3.2 Terminal connections

All the Ingenico 5100 connections are done on the back of the terminal.



* **ELSV** : Extra Low Safety Voltage

** **TNV3** : Telecommunication network voltage circuit

⚡ The power supply socket and telephone socket should comply with applicable standards. Ask your installer for advice.

- ⚡ **Connection to the electric network should be carried out last when the telephone or any peripherals have been connected.**
- ⚡ **Maximum length of cable: 2m50**

Connection to the Switched Telephone Network (STN)

Connect the telephone cable connector (supplied with the terminal) to the socket and connect the other end to the telephone wall support.

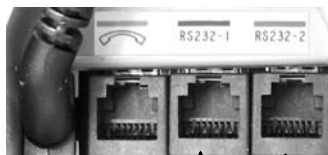


↑
Telephone line

- ⚡ **Ingenico 5100 connection options depend on the model**

Connecting to a peripheral

Switch the terminal off and connect the peripheral cable to the terminal on the RS232 input/output marked RS232-1 or RS232-2.



↑ ↑
Serial links

Connection to electric network

- 🔌 Connect the terminal to the power supply unit



- 🔌 Then connect the other cable to the power supply unit and connect the twin pronged electrical plug to an electrical point



- ❶ A cable securing plate supplied with the terminal keeps the cables in place.

Cable securing plate



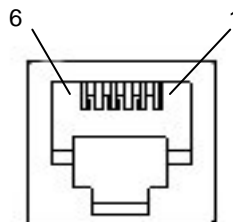
Power supply

- Power supply unit supply voltage 110 to 230 VAC
- Frequency 50 Hz – 60Hz
- Voltage output 6,5 to 9 Vdc, 350 mA



RS232-1 and RS232-2 Interface

#	Com 1	Signal	Com 2	Signal
1	Power	→	NC	→
2	Tx_RS232-1	→	Tx_RS232-2	→
3	Rx_RS232-1	←	Rx_RS232-2	←
4	RTS_RS232-1	→	RTS_RS232-2	→
5	CTS_RS232-1	←	CTS_RS232-2	←
6	Ground	↔	Ground	↔



3.3 Installing a SIM card

The SIM card connectors are located under the terminal.

Installing the SIM card

- ☞ Open the cover,
- ☞ Unlock the connector by sliding the metallic part in the direction of the **OPEN** arrow,
- ☞ Lift the card housing up,
- ☞ Insert a SIM card into the housing,
- 💡 **Make sure you put it in the right way, follow the foolproof lug!**
- ☞ Put the housing back down again,
- ☞ Lock the connector by sliding the metallic part in the direction of the **LOCK** arrow.

Removing the SIM card

- ☞ Follow the installing instructions to remove the SIM card.



❗ With **SIMcards** it is possible to access different services and to add new functions to the terminal. For example, a SIM card will be supplied by the bank to manage the Moneo electronic purse.

3.4 Troubleshooting

The terminal does not come on

- ☞ Check wall support connections (both electric and telephone connections).

You cannot connect to the telephone network

- ☞ Check wall support connections (both electric and telephone connections).

There is nothing on the receipt that comes out of the terminal

- ☞ Check that the roll of paper has been put in the right way (see chapter 2.4 “Changing the roll of paper”)

4 Recommendations

4.1 Security

Your terminal fulfils the PCI security requirements.

Tasks to be done by the installer

Because this is a secure PIN device, Ingenico advises you to check the following prior to installing your PIN pad, and thereafter on a daily basis.

4.1.1 Checking PIN pad integrity

- (1) Check that there is NO external damage to the plastic housing; particularly around the Keypad, display and card reader areas.
- (2) Ensure that there are NO additional cables protruding from the PIN pad;
- (3) There should be NO holes drilled into any area of the housing.

4.1.2 Selecting the place where the PIN pad is installed

- (4) Ensure that there are NO security cameras focusing on the PIN pad.
- (5) Ensure that there are NO close objects where a camera can be hidden.
- (6) Ensure that the PIN pad can NOT be observed from outside (any window or door) while PIN entry.

4.1.3 Necessary advertisements for customers

- (7) Ensure “wait your turn” sticker is placed where clients in queue can’t observe the Keypad while PIN entry is in progress.
- (8) A warning must be placed near the terminal. This advertisement must be visible for the customers before the PIN entry. The advertisement must indicate (textual and graphically):
 - how to protect the PIN entry from other customers and the cashier (using the hand not used for the PIN entry if necessary)
 - that integrity of the PIN pad must be checked
 - Smart card reader must be facing the customer during PIN entry.

4.1.4 Training cashiers

- (9) Installer must train cashiers how to check the integrity of the terminal. This check must occur on a daily basis and must include all points listed in sections 4.1.1 and 4.1.2.
- (10) Installer must train cashiers to encourage customers to respect “wait your turn” sticker.

4.2 Safety

As this terminal does not have a power off switch, the disconnecting device is the main transformer; the power supply plug must therefore be easily accessible.

Safety directives concerning the Lithium battery

- Keep out of the reach of children.

- If any elements of the battery are swallowed, the person should consult a doctor or seek medical assistance immediately.
- It is important to comply with the "+" and "-" polarities.
- Do not try to reactivate the battery using a heat source, an electric recharge or any other means.
- Do not throw the battery into the fire.
- Do not dismantle the battery.

Generally speaking

- There is a danger of explosion if the battery has not been replaced correctly.
- Replace the battery with same type elements or similar type elements recommended by the manufacturer only.
- Dispose of used battery in compliance with manufacturer instructions.
- Do not throw the battery into the bin; dispose of them in suitable recycling facilities.

4.3 Switched Telephone Network (STN)

This equipment has been certified according to the 98/482/EC decision made by the Pan European committee concerning the connection of equipments to the switched telephone network. The certification does not however provide unconditional assurance of optimum operation when connecting to the telephone network.

If you encounter any difficulties, contact your dealer or installer first.

4.4 WEEE



This symbol on the product or on its packaging means that this product should not be treated as household waste.

To minimise environmental impacts and the disposal of waste, this product should be handed over to a separate collection system in order to facilitate recycling and recovery.

For more detailed information, please contact your reseller.

5 Index

C

Card reading · 7
Connecting peripherals · 10

I

Installing the SIM card · 12

M

Magnetic stripe card · 7

P

Paper roll · 8

Power supply · 11

R

Removing the SIM card · 12

S

SIM · 12
Smart card · 7

T

Terminal location · 9

NON CONTRACTUAL DOCUMENT

INGENICO owns exclusive rights on this document.

All diffusion, all copies, all entire or partial production by any process, as long as it is made without the authorization of INGENICO, the promoter, will be considered as illicit, and will form an infringement, penalized by the clauses L.335-2 and following, of the « Code de la propriété intellectuelle ».

INGENICO keeps the right without notice to modify the characteristics and the functions of this device.

INGENICO is not responsible for any use of this device, which would be non consistent with the present document.

Your contact

Ingenico

192 avenue Charles de Gaulle

92200 Neuilly sur Seine - France

Tél. : + 33 1 46 25 82 00 - Fax : + 33 1 47 72 56 95

www.ingenico.com

DIV1158B

